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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,014	09/20/2001	Richard Francis Russell	2001-0158.02	3768

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LEXMARK INTERNATIONAL, INC.  
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EXAMINER
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PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 01/09/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/957,014

Applicant(s)

RUSSELL ET AL.

P24

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6 & 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. This communication is in response to request for reconsideration filed 1/03/03, claims 1-25 remain pending and are hereby set forth for examination.
2. IDS has been considered and initialed accordingly corresponding attachment(s) should be enclosed as noted on PTO-form 326.

***Claim Rejections - 35 USC § 102***

3. Quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action may be found in previous office action.
4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Cheshire, S. Current Meeting Report, Cheshire et. al. (Cheshire), 03/1999.

Regarding claim 1, Cheshire discloses an auto-configuration IP assignment to new devices, the method including the steps of:

a computer node communicatively coupled on a LAN network and a network ("adapter") interface to communicatively coupling a device to said network (page 2), said computer performing the steps of:

incorporating a randomly generated internet protocol address in an address resolution protocol (ARP) probe (page 3);

sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and

if said internet protocol address is not in use, then assigning said internet protocol address to said network interface (page 3).

5. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed et. al. (Reed) U.S. Patent No. 6,061,739.

Regarding claim 2-5, iterating i.e. repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (Cheshire page 3), however Stuart does not explicitly teach wherein the predetermined number is 30;

Reed teaches a first host computer incorporating a generating an internet protocol address in a address resolution protocol probe broadcast request (col 2/lines 20-30),

sending said address resolution on an Ethernet LAN network for determining if an internet protocol address is in use (col 2/lines 20-30);

wherein the number of requests is a preset threshold (col 4/lines 19-20) and first specified time interval to wait for a response are programmable values (col 5/lines 28-33);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include means for repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (e.g. 30), motivation would be to program the number of request issues and the time to wait for a response based on network environment factors such as network latency and its dependency on network traffic, distance and the characteristic of the communication links.

Regarding claim 6, if said number of times said generating step is performed exceeds said predetermined number then said computer fails to automatically assign said network adapter an internet protocol address (Cheshire: page 3).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire in view of Reed in further view of Mellquist U.S. Patent No. 6,115,545.

Regarding claim 7, although prior art discloses sending an ARP probe message (i.e. "broadcasting discovery packet") on said network; and determining if said network adapter has a "valid" internet protocol address, it does not explicitly teach determining if internet protocol address is valid

Mellquist teaches that in order to configure a device with an internet protocol address it is required that a free address in the range of valid unique addresses must be selected and that a sub-net mask having a mask that must be the same on all entities across the sub-net is required (col 3/lines 11-19);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to ensure that a unique valid internet address is used to configure a network device, as taught by the reference, where such validation includes verifying that an internet protocol address having the same

mask as all entities on the subnet, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

7. Claims 8-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheshire-Reed in view of Mellquist U.S. Patent No. 6,115,545 in further view of Request for Comments (2563), Troll, May 1999

Regarding claim 8, however the above-mentioned prior art of record does not explicitly teach determining whether said network allows said computer to assign an internet protocol address to network devices, prior to generating step;

Troll teaches client nodes configured to be able to determine whether or not the network is being centrally administrated, allowing it determine whether or not it should assign itself a IP (link-local) address (page 2), including an Auto-configure option which allows a computer node to determine whether or not it should generate an IP address (page 3) (i.e. prior to performing the generating step).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the Troll teachings to implement determining whether said network allows said computer to assign an internet protocol address to said network adapter, motivation would be to enable the flexibility of an Auto-configure Option along with the IP address assignment that notifies the client that the network does not have an IP address to offer upon determining the absence of an DHCP server.

Regarding claim 9, said device is a printer (Cheshire: page 5).

Regarding claim 10, said network adapter is a ("low-cost") network interface (adapter)(Cheshire: page 3).

Regarding claim 11, this claim is substantially the same as claims 1 and 7 as discussed above, same rationale of rejection is applicable.

Regarding claim 12, wherein if said internet protocol address is in use, then further comprising the step of repeating said generating step, said incorporating step, said sending step and said determining step (Cheshire, page 3).

Regarding claims 13-16, these claims are substantially the same as claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claim 17, this claim comprised a network based ("imaging") system, including limitations on claims 1-10 when combined including the instructions executable on a computer to perform the method steps disclosed on the method claims 1-10, same rationale of rejection is applicable.

Regarding claims 18-22, these apparatus (system) claims are substantially the same as the method claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claims 23-24, these apparatus (system) claims are substantially the same as claims 7-8 respectively, same rationale of rejection is applicable.

Regarding claim 25, this apparatus (system) claim is substantially the same as the method claim 10, same rationale of rejection is applicable.

#### *Response to arguments*

8. Applicant argues in regards to claim 1, prior does not teach claim limitation as recited, specifically, an interface communicatively coupled to a device separate from the computer and where the computer obtains an IP address for the network adaptor to permit network communication by the device, because the Cheshire references according to applicant on pages 2-3, teaches where the "network connected computer" and this is distinguishable from claimed invention.

In response to applicant's argument, applicant's interpretation of the prior art is noted, however claim recites a computer communicatively coupled to a network, this is not distinguishable from a "network connected computer". Cheshire discloses where a computer is introduced i.e. connected to a LAN for connectivity the others systems and the services provided on that network (see page 2); (b) the features upon which applicant relies (i.e., "an interface communicatively couples a device separate from the computer and that the computer obtains an IP address for the network adaptor to permit network communication by the device") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

9. Applicant argues in regarding claim 2-6 are believed allowable due to their dependence, directly or indirectly on allowable base claim 1.

In response to this argument, claims 2-6 due to their dependency to claim 1 are not found allowable.

10. Applicant argues in regards to claim 1, that the motivation to combine the Cheshire and Reed reference is not disclosed, taught or suggested in neither the references.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

11. Applicant argues in regards to claim 1, that prior art does not teach the subject matter of claim 1, specifically, a computer that generates and assigns an IP address to a network adapter that is distinct from network connected computer, thus providing an IP address for use by a device that is distinct from the computer, because the Cheshire merely discloses the self configuration of an interface with an IP address.

In response to the above argument, it is noted that the features upon which applicant relies (i.e., “computer that generates and assigns an IP address to a network adapter that is distinct from a computer, thus providing an IP address for use by a device that is distinct from the computer”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

12. Applicant in regard to claim 1, that prior art does not teach claim 1 subject matter, because the Cheshire reference teaches a self assignment of an IP address where the device sees N unanswered ARP request and adopts the request network address and responds to the ARP with its hardware address.

In response to the above argument, it is noted that (a) applicant's interpretation of the prior art is noted, however Reed discusses as prior art where a remote server computer provides an IP address for a device (see col 2/lines 49-67) (b) the features upon which applicant relies (i.e. “self assignment of an IP address where the device sees N unanswered ARP request and adopts the request network address and responds to the ARP with its hardware address”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. Applicant argues in regards to claim 7, that this claim is patentable due to its dependency on claim 1, and further because the prior art does not teach determining if the network adapter has a valid IP address, because the cited portions of the prior art do not determine if an IP address is valid.

In response to the above mentioned argument, according to applicant's specification validation of an IP address broadly speaking refers to an IP address that has the same subnet where the computer is connected (see page 5, lines 25-32). Given the explicit suggestion of the Mellquist reference indicating the use of valid addresses for assignment including an IP address that has the same subnet where the computer providing the IP address is connect and the knowledge of one ordinary skilled in the art. The step of determining whether an IP is valid would have been obvious and readily performed by one ordinary skilled in the art, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

14. Applicant argues in regards to claim 8, that the prior art does not teach claim limitation as recited because the Troll reference self-assigns an IP address.

In response to the above-mentioned argument, applicant's interpretation of the Troll reference is noted, however the features upon which applicant relies on are not claim, e.g. claims do not recited that where the interface communicatively couples a device separate from the computer and that the computer obtains an IP address for the network adaptor to permit network communication by the device, thereby the network device does not self-assign itself an IP address.

15. Applicant argues in regards to claims 9-10, that the prior art does not teach a low-cost adapter, therefore does not teach the subject matter of claim 10.

In response to the above-mentioned argument, in response to argument (c), it is respectfully noted applicant is entitled to be his or her own lexicographer, however claims and disclosures are not to be evaluated in a vacuum. Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). The claimed term "low-cost network adapter", has been given the broadest reasonable interpretation in light of the disclosure.

16. Applicant's arguments have been fully considered but not rendered persuasive.

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Prosecution of this application is closed by means of this final office action § 1.113, applicant may request continued examination of the application by filing a Request for Continued Examination of under 37 CFR § 1.114 and providing the corresponding fee set forth in § 1.17(e) for the submission of, but not limited to, new arguments, an information disclosure statement, an amendment to the written description, claims, drawings, or new evidence in support of patentability. Or applicant whose claim has been twice rejected, may appeal from the decision of the administrative patent judge to the Board of Patent Appeals and Interferences under 35 U.S.C. §134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (703) 305-9705. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this final action should be mailed to:

**Box AF**

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or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry


Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).

(b1)

B. Prieto  
TC 2100  
Patent Examiner  
January 5, 2004

  
JACK B. HARVEY  
SUPERVISORY PATENT EXAMINER